

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-27 (Canceled).

Claim 28 (Currently Amended): An electroluminescent device comprising at least one carrier substrate (1, 1') carrying an electroactive multilayer stack (3) that is placed between a lower electrode and an upper electrode, each electrode comprising at least one electrically conducting layer (2, 2') in electrical connection with at least one current bus, wherein at least one of the current buses is in electrical connection with at least one current lead comprising either conducting wires (4) or a network of wires running over or within the layer (2, 2') forming the electrode suitable for distributing, over the surface of at least one of the conducting layers (2, 2'), electrical energy so as to convert the electrical energy into light uniformly within the electroactive multilayer stack (3), wherein the electroactive multilayer stack comprises:

- (a) least one HIL layer (3a) based on an unsaturated, heterocyclic compound 3-15 nm in thickness; an HTL layer (3b), 10-150 nm in thickness, of N,N'-diphenyl-N,N'-bis(3-methylphenyl)-1,1'-biphenyl 4,4'diamine (TPD) or N,N'-bis-(1-naphthyl)-N,N'-diphenyl-1,1'-biphenyl-4,4'-diamine ((α -NPD); a layer (3c), 50-500 nm in thickness, of evaporated molecules of the complex AlQ₃ (aluminum tris(8-hydroxyquinoline)) optionally doped with rubrene, DCM or quinacridone; and an ETL layer (3d), 10-300 nm in thickness, of 2-(4'-biphenyl)-5-(4''-tert-butylphenyl)-1,3,4-oxadiazole (t-Bu-PBD) or 3-(4'-biphenyl)-4-phenyl-5-(4''-tert-butylphenyl)-1,2,4-triazole (TAZ);

- (b) at least one HIL layer (3a) made of PEDT/PSS 10-300 nm in thickness;
and a layer (3b) of polymers based on PPV, PPP, DO-PPP, MEH-PPV or
CN-PPV, 50-500 nm in thickness; or
- (c) at least one layer (3a) based on an active material 100-1000 nm in
thickness, this layer (3a) being joined on either side to insulating layers
(3e, 3f) made of a dielectric material with a thickness of 50-300 nm.

Claim 29 (Previously Presented): The device as claimed in claim 28, wherein the conducting wires (4) are metal wires, optionally covered with a surface coating, with a diameter of between 10 and 100 μm , which are straight or corrugated, and deposited on a sheet of thermoplastic (5).

Claim 30 (Previously Presented): The device as claimed in claim 28, wherein the lower electrode comprises an electrically conducting layer (2) covering a region of the carrier substrate, the lower electrode (2) being based on a doped metal oxide, optionally deposited on a prelayer of the silicon oxide, oxycarbide or oxynitride type, having an optical function and/or an alkali metal barrier function when the substrate is made of glass.

Claim 31 (Previously Presented): The device as claimed in claim 28, wherein the conducting layer (2) forming the lower electrode may be a bilayer formed from an SiOC first layer of between 10 and 150 nm thickness, surmounted by an F:SnO₂ second layer of between 100 and 1000 nm thickness.

Claim 32 (Previously Presented): The device as claimed in claim 31, wherein the device comprises a bilayer formed from a first layer based on SiO₂ doped with a little metal

of the A1 or B type, about 20 nm in thickness, surmounted by an ITO second layer of about 100 to 300 nm thickness.

Claim 33 (Previously Presented): The device as claimed in claim 31, wherein the device comprises a layer formed from ITO about 100 to 300 nm in thickness.

Claim 34 (Previously Presented): The device as claimed in claim 28, wherein the multilayer stack comprises at least one HIL layer (3a) based on an unsaturated, heterocyclic compound 5 nm in thickness; an HTL layer (3b), 50 nm in thickness, of N,N'-diphenyl-N,N'-bis(3-methylphenyl)-1,1'-biphenyl 4,4'-diamine (TPD) or N,N'-bis-(1-naphthyl)-N,N'-diphenyl-1,1'-biphenyl-4,4'-diamine ((α -NPD); a layer (3c), 100 nm in thickness, of evaporated molecules of the complex AlQ₃ (aluminum tris(8-hydroxyquinoline)) optionally doped with rubrene, DCM or quinacridone; and an ETL layer (3d), 50 nm in thickness, of 2-(4'-biphenyl)-5-(4''-tert-butylphenyl)-1,3,4-oxadiazole (t-Bu- PBD) or 3-(4'-biphenyl)-4-phenyl-5-(4''-tert-butylphenyl)-1,2,4-triazole (TAZ).

Claim 35 (Previously Presented): The device as claimed in claim 28, wherein the multilayer stack comprises at least one HIL layer (3a) made of PEDT/PSS 50 nm in thickness; and a layer (3b) of polymers based on PPV, PPP, DO-PPP, MEH-PPV or CN-PPV, 100 nm in thickness.

Claim 36 (Previously Presented): The device as claimed in claim 28, wherein the multilayer stack comprises at least one layer (3a) based on an active material 500 nm in thickness, this layer (3a) being joined on either side to insulating layers (3e, 3f) made of a dielectric material with a thickness of 150 nm.

Claim 37 (Previously Presented): The device as claimed in claim 28 wherein the electrically conducting layer (2') forming the upper electrode is based on a metal or metal alloy of aluminum.

Claim 38 (Previously Presented): The device as claimed in claim 28 wherein the electrically conducting layer forming the upper electrode (2¹) is based on an electropositive metal or an alloy of said metals.

Claim 39 (Previously Presented): The device as claimed in claim 28, wherein at least one of the two electrodes comprises an electrically conducting layer joined to a network (4) of conducting wires/conducting strips.

Claim 40 (Previously Presented): The device as claimed in claim 39, wherein the conducting network (4) comprises a plurality of essentially metallic wires placed on the surface of a sheet (5) of polymer.

Claim 41 (Previously Presented): The device as claimed in claim 39, wherein the wires/strips (4) are placed essentially parallel to one another, the ends of said wire/strips extending beyond the substrate region covered by said electrically conducting layer on two of its opposed edges.

Claim 42 (Previously Presented): The device as claimed in claim 39 wherein the ends of the wires/strips (4) joined to the electrically conducting layer (2) of the lower electrode are electrically connected to current buses in the form of flexible strips (6a, 6b)

made of insulating polymer, these being covered on one of their faces with a conductive coating.

Claim 43 (Previously Presented): The device as claimed in claim 42, wherein said current buses are in the form of conducting clips that grip the carrier substrate (1, 1').

Claim 44 (Previously Presented): The device as claimed in claim 42, wherein the set of current buses for the lower and upper electrodes are brought together in the form of a strip of approximately rectangular shape, formed from an electrically insulating and flexible polymer support, with, on two opposed edges, a conductive coating on one face and, on its other two edges, a conductive coating on the face on the opposite side from the previous one.

Claim 45 (Previously Presented): The device as claimed in claim 28 wherein at least one of the current buses is in the form of a shim (14a, 14b, 15a, 15b), or in the form of one or more conducting wires, or in the form of a point lead made of conducting material.

Claim 46 (Previously Presented): The device as claimed in claim 28 wherein the electroactive stack (3) covers a carrier substrate region which is a polygon, a rectangle, a diamond, a trapezoid, a square, a circle, a semicircle, an oval or any parallelogram.

Claim 47 (Previously Presented): The device as claimed in claim 28 wherein the device is comprised in an electroluminescent system.

Claim 48 (Previously Presented): The device as claimed in claim 47, wherein the electroluminescent system is transparent.

Claim 49 (Previously Presented): The device as claimed in claim 47, wherein the device is an electroluminescent glazing unit.

Claim 50 (Previously Presented): The device as claimed in claim 49, wherein the electroluminescent glazing unit comprises at least one flat glass pane and/or at least one curved glass pane.

Claim 51 (Previously Presented): The device as claimed in claim 47 wherein the device also includes at least one of the following coatings: an infrared-reflecting coating, a hydrophilic coating, a hydrophobic coating, a photocatalytic coating with anti-fouling properties, an anti-reflection coating, an electromagnetic shielding coating.

Claim 52 (Previously Presented): The device as claimed in claim 47 wherein the carrier substrate (1) is rigid, semirigid or flexible.

Claim 53 (Previously Presented): A method for glazing automobiles or buildings comprising applying the device as claimed in claim 28 to an automobile or building.